Docket: 02-321

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| Substitute for form 144 | | | | Application Number | 10/632,061 | |
| INFOR | RMATION | DISC | LOSURE | Filing Date | 07/31/2003 | |
| STATEMENT BY APPLICANT | | | | First Named Inventor | Robert E. Richard | |
| | | | | Group Art Unit | 1615 | |
| (use as many sheets as necessary) | | | ecessary) | Examiner Name | unassigned | |
| Sheet | 1 | of | 1 | Attorney Docket Number | 02-321 | |

| Examiner | Cite | U.S. Patent Document | | Name of Patentee or Applicant | Date of Publication of Cited Document |
|-----------|------|----------------------|----------------|-------------------------------|---------------------------------------|
| Initiats* | No. | Number | Class/Subclass | of Cited Document | MM-DD-YYYY |
| /C.S./ | 1 | 20020077418 A1 | 525/88 | Chen et al. | 06-20-2002 |
| /C.S./ | 2 | 20030138415 A1 | 424/94.4 | Shepard | 07-24-2003 |
| 7C.S./ | 3 | 4038264 | 260/79.3 | Rostoker et al. | 07-26-1977 |
| /C.S./ | 4 | 6110483 | 424/423 | Whitbourne et al. | 08-29-2000 |

| Examiner | Cite | 1 | Foreign Patent C | Document | Name of Patentee or Applicant of | Date of Publication | T |
|-----------|-------------------|----|------------------|----------------|----------------------------------|---------------------------------|---|
| Initials* | Initials* No. Off | | Number * | Class/Subclass | Cited Document | of Cited Document MM-DD-YYYY | |
| /C.S./ | | EP | 0 484 057 A2 | A61L 33/00 | Walles | 05-06-1992 | |
| | | wo | 01/18079 A1 | C08F 220/30 | Schlueter et al. | 03-15-2001 | |
| | | wo | 02/47731 A2 | A61L | Pinchuk et al. | 06-20-2002 | |
| | | wo | 03/032815 A2 | A61B | Naimark et al. | 04-24-2003 | |
| | | wo | 03/084583 A2 | A61L 31/00 | Hermann et al. | 10-16-2003 | |
| | | wo | 03/090806 A1 | A61L 31/10 | Schwarz et al. | 11-06-2003 | |
| | | wo | 2004/000267 A1 | A61K 9/00 | Schwarz et al. | 12-31-2003 | |
| | | wo | 2004/000380 A1 | A61L 27/34 | Schwarz | 12-31-2003 | |
| | | wo | 2004/000381 A1 | A61L 27/34 | Schwarz et al. | 12-31-2003 | |
| | | wo | 2004/000384 A1 | A61L 31/10 | Schwarz | 12-31-2003 | |
| | | wo | 2004/011055 A2 | A61L 31/00 | Jianmin et al. | 02-05-2004 | |
| | | wo | 2004/050140 A2 | A61M | Palasis et al. | 06-17-2004 | 1 |
| | | wo | 2004/080397 A2 | A61K | Schwarz | 09-23-2004 | |
| W | | wo | 2004/091714 A2 | A61M 36/00 | Robert E. Richard | 10-28-2004 | 1 |

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| STATEMENT BY APPLICANT | | | | First Named Inventor | Robert E. Richard et al. | |
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| BADEN | Examiner | Cite | U.S. Patent | Document | Name of Patentoc or Applicant | Date of Publication of Cited Document MM- |
| | Laminer Initials* | No. | Number | Class/Subclass | of Cited Document | DD-YYYY |
| | /C.S. | | 5,741,331 | 623/11 | Pinchuk | 04/21/1998 |
| | | 2. | 4,946,899 | 525/244 | Kennedy et al. | 08/07/1990 |
| | | 3. | 2002/0107330 | 525/242 | Pinchuk et al. | 08/08/2002 |
| | | 4. | 5,879,697 | 424/422 | Ding et al. | 03/09/1999 |
| | | 5. | 6,099,562 | 623/1.46 | Ding et al. | 08/08/2000 |
| | | 6. | 5,304,121 | 604/53 | Sahatjian | 04/19/1994 |
| | | 7. | 5,716,981 | 514/449 | Hunter et al. | 02/10/1998 |
| | | 8. | 5,616,608 | 514/449 | Kinsella et al. | 04/01/1997 |
| | | 9. | 5,733,925 | 514/449 | Kunz et al. | 03/31/1998 |
| | | 10. | 5,258,020 | 623/1 | Froix | 11/02/1993 |
| | | 11. | 6,335,029 B1 | 424/423 | Kamath et al. | 01/01/2002 |
| | | 12. | 6,280,411 B1 | 604/103.05 | Lennox | 08/28/2001 |
| | | 13. | 5,954,706 | 604/509 | Sahatjian | 09/21/1999 |
| | | 14. | 2002/0045706 A1 | 525/100 | Houston et al. | 04/18/2002 |
| | | 15. | 5,856,367 | 521/64 | Barrows et al. | 01/05/1999 |
| | | | | | | |
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| Examiner | Cite | | | Name of Patentee or Applicant of Cited | Date of Publication of | T | |
|-------------|--|---------------------|---------------------|--|------------------------|-------------------------------|------------|
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| Examinor Initials* | Cite No. 1 | magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, cuty amove country where published. | |
| /C.S./ | 1. | James F. Beecher et al., "Morphology and Mechanical Behavior of Block Polymers," J. Polymer Sci. Part C, no. 26 (1969), pp. 117-134. | |
| | 2. | Diblock and Triblock Copolymers, pp. 141-151. | |
| | | NO PUBLUCATION DATE | |
| /C.S. | 3. | Kohtaro Kimishima et al., "Control of Self-Assembled Structures in Binary Mixtures of A-B Diblock Copolymer and A-C Diblock Copolymer by Changing the Interaction between B and C Block Chains," <i>Macromolecules</i> , 1999, no. 32, pp. 2585-2596. | |
| /C.S | 4. | Richard J. Spontak et al., "Phase Behavior of Ordered Diblock Copolymer Blends: Effect of Compositional Heterogeneity," Macromolecules, 1996, no. 29, pp. 4494-4507. | |
| /C.S | 5. | Hong G. Jeon et al., "Microphase and Macrophase Transitions in Binary Blends of Diblock Copolymers," <i>Macromolecules</i> , 1999, no. 32, pp. 1803-1808. | |
| | 6 | Immiscible Polymer Blends. http://www.psrc.usm.edu/macrog/iblend.htm. | + |
| | 7. | L. H. Sperling, Polymeric Multicomponent Materials. An Introduction, New York (John Wiley & Sons), pp. 284-285. NO PUBLUCATION DATE | |
| /C. | 8. S/ | Joseph C. Salamone, ed., Concise Polymeric Materials Encyclopedia, Boca Raton (CRC Press, 1999), pp. 812-814. | |
| | | Peference: Polymer Properties. http://www.sigmauldrich.sem/ime/assets/5500/Thornal Transitions of Homopolymers.pdf. | 十 |

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| | | OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS | | | | |
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| erminer rials* | Cite Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or coun where published. | | | | | |
| | 10. | The Glass Transition, http://www.psrc.usm.edu/macrog/tg.htm. | | | | |
| | | NO PUBLUCATION DATE | | | | |
| /C.S. | 11. / | C. Moineau et al., "Synthesis and Characterization of Poly(methyl methacrylate)-block-poly(n-butyl acrylate)-block-poly(methyl methacrylate) Copolymers by Two-Step Controlled Radical Polymerization (ATRP) Catalyzed by NiBr ₂ (PPh ₃) ₂ , 1," Macromolecules, 1999, no. 32, pp. 8277-8282. | | | | |
| | 12. | Devon A. Shipp et al., "Water-Borne Block Copolymer Synthesis and a Simple and Effective One-Pot Synthesis of Acrylate-Methacrylate Block Copolymers by Atom Transfer Radical Polymerization," Am. Chem. Soc., Polym. Prep., 1999, vol. 40, pp. 448-449. | | | | |
| | 13. | Y.K. Chong, "A More Versatile Route to Block Copolymers and Other Polymers of Complex Architecture by Living Radical Polymerization: The RAFT Process," <i>Macromolecules</i> , vol. 32, 1999, pp. 2071-2074. | | | | |
| | 14. | Kathryn L. Beers et al., "Controlled/Living Radical Polymerization in the Undergraduate Laboratories. 1. Using ATRP to Prepare Block and Statistical Copolymers of n-Butyl Acrylate and Styrene," vol. 78, no. 4, Apr. 2001, pp. 544-547. | | | | |
| | 15. | Michael J. Monteiro et al., "Symhesis of Butyl Acrylate-Styrene Block Copolymers in Emulsion by Reversible Addition-Fragmentation Chain Transfer: Effect of Surfacant Migration upon Film Formation," Journal of Polymer Science: Part A: Polymer Chemistry, vol. 38, 2000, pp. 4206-4217. | | | | |
| | 16. | Kelly A. Davis et al., "Preparation of Block Copolymers of Polystyrene and Poly (t-butyl acrylate) of Various Molecular Weights and Architectures by Atom Transfer Radical Polymerization," Journal of Polymer Science: Part A: Polymer Chemistry, vol. 38, 2000, pp. 2274-2283. | | | | |
| | 17. | Karine Tortosa et al., "Synthesis of Polystyrene-block-poly(butyl acrylate) Copolymers Using Nitroxide-Mediated Living Radical Polymerization in Miniemulsion," Macromolecular Rapid Communications, vol. 22, no. 12, 2001, pp. 957-961. | | | | |
| $\overline{\mathbf{V}}$ | 18. | Ben Reeves, "Recent Advances in Living Free Radical Polymerization," University of Florida, Nov. 20, 2001, pp. 1-14. | | | | |

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